

In the Claims:

1. (Currently Amended) A method comprising:

receiving ~~a frame~~ one or more frames of ~~data;~~ data in a sequence of frames; and

~~incrementing a frame counter; and~~

demodulating ~~[[the]]~~ a first frame of the one or more frames of data based ~~on a value of~~
~~the frame counter;~~ upon a position of the first frame in the sequence of frames, wherein, if the
first frame is in a first position, demodulating the first frame only as a single slot format frame.

2. (Currently Amended) The method of claim 1 further comprising:

if the demodulating of the first frame fails, ~~repeating the receiving, incrementing, and~~
~~demodulating;~~ receiving a second frame of the one or more frames and demodulating the second
frame based upon a position of the second frame in the sequence of frames; and

if the demodulating of the first frame of data succeeds, decoding a third frame of ~~data-~~
data, the third frame associated with the ~~demodulated~~ first frame of data; and

~~resetting the frame counter.~~

3. (Currently Amended) The method of claim 2, wherein if the demodulating of the first
frame of data succeeds, ~~after the resetting the method further comprises repeating the receiving,~~
~~incrementing, and demodulating;~~ receiving the second frame as a frame of data in the first
position.

4. (Currently Amended) The method of claim 2, wherein the ~~demodulated~~ first frame of
data is a frame of control channel data and the third frame of data ~~associated with the~~
~~demodulated frame of data~~ is a frame of data channel data.

5. (Currently Amended) The method of claim 2, wherein the ~~frame counter is reset to zero~~, position of each of the one or more frames of data is monitored at least in part with a frame counter storing a value.

6. (Currently Amended) The method of [[claim 1,]] claim 5, wherein the demodulating comprises:

if the value of the frame counter is equal to one,

i) demodulating the first frame of data as a single slot format frame;

if the value of the frame counter is equal to two or three,

ii) demodulating the first frame of data as a single and dual slot format frame; and

if the value of the frame counter is greater than three;

iii) demodulating the first frame of data as a single, dual, and quad slot format frame.

7. (Currently Amended) The method of claim 6, wherein the ii) demodulating comprises:

1) demodulating the first frame of data as a single slot format frame; and

if the 1) demodulating fails,

2) demodulating the first frame of data as a dual slot format frame.

8. (Currently Amended) The method of claim 7, wherein the 2) demodulating demodulates the first frame of data and a ~~frame of data~~ fourth frame of data, the fourth frame of data having been received immediately prior to the first frame of data.

9. (Currently Amended) The method of claim 6, wherein the iii) demodulating comprises:

a) demodulating the first frame of data as a single slot format frame;

if the a) demodulating fails,

b) demodulating the first frame of data as a dual slot format frame; and

if the b) demodulating fails,

c) demodulating the first frame of data as a quad slot format frame.

10. (Currently Amended) The method of claim 9, wherein the b) demodulating demodulates the first frame of data and a ~~frame of data~~ fourth frame of data, the fourth frame of data having been received immediately prior to the first frame of data and the c) demodulating demodulates the first frame of data and ~~three frames of data~~ a fifth, sixth, and seventh frame of data, the fifth, sixth, and seventh frames of data having been received sequentially immediately prior to the first frame of data.

11. (Currently Amended) The method of claim 6, wherein the first frame of data is carried on a first channel and a fourth frame is carried on a second channel ~~there are two channels with each channel carrying a frame of data to be demodulated,~~ and wherein each a i), ii), or iii) ~~demodulating~~ demodulation of the first frame of data at a ~~specified slot format~~ comprises:

testing if a demodulating the first frame of data on the first channel can be demodulated with the specified slot format; channel;

if the demodulating the first frame of data on the first channel is successful, ~~can be demodulated with the specified slot format,~~

testing if the first channel is intended for a current user;

if the first channel is intended for the current user, decoding a fifth frame of data-

~~data, the fifth frame of data associated with the demodulated first frame of data; frame of data if the first channel is intended for the current user;~~

~~if the demodulating the first frame of data on the first channel fails, cannot be demodulated with the specified slot format,~~

~~testing if a demodulating the fourth frame of data on the second channel; channel can be demodulated with the specified slot format if the first channel cannot be demodulated with the specified slot format;~~

~~if the demodulating the fourth frame of data on the second channel is successful, can be demodulated with the specified slot format,~~

~~testing if the second channel is intended for the current user;~~

~~if the second channel is intended for the current user, again demodulating the first frame of data on testing again if the first channel with the same demodulation that was successful in demodulating the fourth frame of data; can be demodulated with the specified slot format; and~~

~~if the demodulating the first channel with the same demodulation that was successful in demodulating the fourth frame is successful, decoding a sixth frame of data data, the sixth frame of data associated with the demodulated fourth frame of data on the second channel. channel if the first channel can be demodulated with the specified slot format;~~

12. (Currently Amended) The method of claim 1, wherein the one or more frames ~~frame of~~ data ~~[[is]]~~ are a frame-frames of control channel data.

13. (Currently Amended) The method of claim 12, wherein the one or more frames ~~frame of~~ control channel data ~~[[is]]~~ are carried on a pair of forward-link packet data control channels (FPDCCH).

14. (Currently Amended) A method for demodulating a control channel, wherein frames of data carried on the control channel may be formatted differently based on channel quality, the method comprising:

determining a channel quality; and

demodulating a frame of data based on the channel ~~quality-quality~~, wherein

if the channel quality is high,

demodulating the frame of data using a single slot frame format,

if the channel quality is low,

demodulating the frame of data using a quad slot frame format, and

if the channel quality is medium,

demodulating the frame of data using a single, dual, and quad slot frame format.

15. (Canceled)

16. (Original) The method of claim 14, wherein a frame of data on the control channel is associated with a frame of data on a data channel, and the method further comprises decoding a frame of data on the data channel associated with the frame of data on the control channel if the demodulation of the frame of data on the control channel succeeds.

17. (Original) The method of claim 14, wherein the channel quality is periodically determined.

18. (Original) The method of claim 14, wherein the channel quality is determined when performance of a device receiving the frames of data degrades below a predetermined threshold.

19. (Original) A circuit comprising:

a buffer to hold a frame of data from a symbol stream;

a frame counter coupled to the buffer, the frame counter to count the number of frames of data held by the buffer since a last successfully demodulated frame of data; and

a demodulator coupled to the buffer and the frame counter, the demodulator containing circuitry to demodulate a frame of data using based on the count from the frame counter.

20. (Original) The circuit of claim 19, wherein the buffer holds a frame of data from two control channels.

21. (Original) The circuit of claim 19, wherein the buffer holds a number of frames of data at least equal to a longest supported slot format.

22. (Original) A wireless receiver comprising:

a radio frequency (RF) processing unit coupled to a signal input, the RF processing unit containing circuitry to filter, amplify, and mix a signal provided by the signal input;

an analog-to-digital converter (ADC) coupled to the RF processing unit, the ADC to convert the filtered, amplified, and mixed signal provided by the RF processing unit into a digital symbol stream; and

a digital signal processing unit coupled to the ADC, the digital signal processing unit containing circuitry to demodulate a frame of control data based on a count of a number of

frames of control data received since a last successfully demodulated frame of control data and to decode a frame of data based on the demodulated frame of control data.

23. (Original) The wireless receiver of claim 22, wherein the digital signal processing unit comprises:

a demodulator coupled to the ADC, the demodulator comprising,

a buffer to hold the frame of control data;

a frame counter coupled to the buffer, the frame counter to count the number of frame of control data held by the buffer since a last successfully demodulated frame of control data;

a demodulator coupled to the buffer and the frame counter, the demodulator containing circuitry to demodulate a frame of data using based on the count from the frame counter; and

a decoder coupled to the demodulator, the decoder containing circuitry to decode the frame of data based on the demodulated frame of control data.

24. (Original) The wireless receiver of claim 22, wherein the wireless receiver is part of a wireless device operating in wireless communications network.

25. (Original) The wireless receiver of claim 24, wherein the wireless communications network is a code-division multiple access (CDMA) compliant network.

26. (Original) The wireless receiver of claim 25, wherein the CDMA compliant network is CDMA2000 compliant.

27. (Original) The wireless receiver of claim 25, wherein the CDMA compliant network is Universal Mobile Telephone System (UMTS) compliant.

28. (New) The method of claim 1, wherein if the first frame of data is in a second or third position, demodulating the first frame of data as a single and dual slot format frame, and if the first frame of data is in a fourth or larger position, demodulating the frame of data as a single, dual and quad slot format frame.